

10/814, 125  
updated Search  
LyCOK 2/28/07

d his

(FILE 'HOME' ENTERED AT 11:17:00 ON 28 FEB 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 11:21:33 ON 28  
FEB 2007

L1 20802 S LYSOPHOSPHATIDYLCHOLINE  
L2 1046 S L1 AND ATHEROSCLEROSIS?  
L3 0 S L1 AND HYPERTWNSION?  
L4 39 S L2 AND HYPERTENSION?  
L5 1152 S L1 AND (CARDIOVASCULAR?)  
L6 304 S L2 AND L5  
L7 921 S L1 AND PHOSPHOCHOLINE?  
L8 2 S L6 AND L7  
L9 2 DUPLICATE REMOVE L8 (0 DUPLICATES REMOVED)  
L10 9 S L5 AND L7  
L11 9 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)  
L12 7 S L11 NOT L9  
L13 0 S L7 AND (METABOLIC SYNDROME)  
L14 0 S L13 AND HEART?  
L15 43 S L7 AND HEART?  
L16 25 DUPLICATE REMOVE L15 (18 DUPLICATES REMOVED)  
L17 17 S L16 AND PD<1999

=>

d his

(FILE 'HOME' ENTERED AT 11:17:00 ON 28 FEB 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 11:21:33 ON 28  
FEB 2007

L1 20802 S LYSOPHOSPHATIDYLCHOLINE  
L2 1046 S L1 AND ATHEROSCLEROSIS?  
L3 0 S L1 AND HYPERTWNSTION?  
L4 39 S L2 AND HYPERTENSION?  
L5 1152 S L1 AND (CARDIOVASCULAR?)  
L6 304 S L2 AND L5  
L7 921 S L1 AND PHOSPHOCHOLINE?  
L8 2 S L6 AND L7  
L9 2 DUPLICATE REMOVE L8 (0 DUPLICATES REMOVED)  
L10 9 S L5 AND L7  
L11 9 DUPLICATE REMOVE L10 (0 DUPLICATES REMOVED)  
L12 7 S L11 NOT L9  
L13 0 S L7 AND (METABOLIC SYNDROME)  
L14 0 S L13 AND HEART?  
L15 43 S L7 AND HEART?  
L16 25 DUPLICATE REMOVE L15 (18 DUPLICATES REMOVED)  
L17 17 S L16 AND PD<1999

=>

ANSWER 14 OF 17 MEDLINE on STN

AN 89322894 MEDLINE

DN PubMed ID: 2665794

TI Regulation of phosphatidylcholine metabolism in mammalian hearts

AU Hatch G M; O K; Choy P C

CS Department of Biochemistry, Faculty of Medicine, University of Manitoba, Winnipeg, Canada.

SO Biochemistry and cell biology = Biochimie et biologie cellulaire, (1989 Feb-Mar) Vol. 67, No. 2-3, pp. 67-77. Ref: 104  
Journal code: 8606068. ISSN: 0829-8211.

CY Canada

DT Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)

General Review; (REVIEW)

LA English

FS Priority Journals

EM 198908

ED Entered STN: 9 Mar 1990

Last Updated on STN: 9 Mar 1990

Entered Medline: 31 Aug 1989

AB Phosphatidylcholine is the major phospholipid in the mammalian heart. Over 90% of the cardiac phosphatidylcholine is synthesized via the CDP-choline pathway. The rate-limiting step of this pathway is catalyzed by CTP:phosphocholine cytidylyltransferase. Current evidence suggests that phosphatidylcholine biosynthesis in the heart is regulated by the availability of CTP and the modulation of cytidylyltransferase activity. Phosphatidylcholine is degraded mainly by the actions of phospholipase A1 and A2, with the formation of lysophosphatidylcholine. Lysophosphatidylcholine may be further deacylated by lysophospholipase or reacylated back into the parent phospholipid by the action of acyltransferase. The accumulation of lysophosphatidylcholine in the heart may be one of the biochemical factors for the production of cardiac arrhythmias.

CT Animals

\*Heart: PH, physiology

\*Mammals: ME, metabolism

Mammals: PH, physiology

\*Myocardium: ME, metabolism

\*Phosphatidylcholines: ME, metabolism

Phosphatidylcholines: PH, physiology

CN 0 (Phosphatidylcholines)


[My List - 0](#) [Help](#)
[Search](#)
[Main Search](#) | [Advanced Keyword Search](#) | [Search History](#)
**Search:**   
[Refine Search](#)

&gt; You're searching: Scientific and Technical Information Center

**Item Information**
**Subscriptions**

Holdings

**Browse Catalog**

by title:

- Biochemistry and cel...

**MARC Display**
**Biochemistry and cell biology Biochimie et biologie cellulaire.**

Alt. Title: Biochemistry & cell biology  
 Biochimie et biologie cellulaire  
 Canadian journal of biochemistry and cell biology = Revue canadienne de biochimie et biologie cellulaire  
 Revue canadienne de biochimie et biologie cellulaire  
 Cover title: Canadian journal of biochemistry and cell biology =

Author: Canadian Biochemical Society.  
 National Research Council Canada.  
 Canadian Society for Cell Biology.

Imprint: Ottawa : National Research Council of Canada = Conseil national des recherches du Canada, 1986-

URL: <http://search.epnet.com/direct.asp?jid=35G&db=aph> Click here for Online version via Academic Search Premier (ASP). Feb 2001-  
<http://proquest.umi.com/pqdweb?RQT=318&VName=PQD&clientid=19649&pmid=36120> Click here for Online version via Proquest. Jan 1, 1998-Present.

Notes: Available on ADONIS, v. 73, no. 1-2 (1995) - v. 80, no. 4 (2002)  
 Includes bibliographies.  
 Articles in English; summaries in English and French.  
 Official journal of the Canadian Biochemical Society and the Canadian Society for Cell Biology.

ISSN: 0829-8211

Subjects: Biological chemistry -- Periodicals.  
 Cytology -- Periodicals.

Description: v. : ill. ; 26 cm.

Continues: Canadian journal of biochemistry and cell biology

[Add to my list](#)
**Subscription Summary**
**US Patent & Trademark Office**

Location: US Patent &amp; Trademark Office

Collection: Biotechnology and Chemical Library Microfilm

Call No.: QP501 .C22 Microfilm  
Copy No.: 1  
Status: Not Currently Received  
Media: <sup>film</sup>  
Type:  
Microfilm: v. 64 (1986) - v. 77 (1999)

Show all  
items

Email: [pamela.hoeft@uspto.gov](mailto:pamela.hoeft@uspto.gov) to ask questions or make suggestions.

Horizon Information Portal 3.05

Brought to you by *Scientific and Technical Information Center*

ANSWER 1 OF 1 MEDLINE on STN  
AN 92197126 MEDLINE  
DN PubMed ID: 1801455  
TI [Phospholipid thrombocyte activating factor, its analogs and antagonists: prospects of their use in medicine].  
Fosfolipidnyi faktor aktivatsii trombotsitov, ego analogi i antagonisty: perspektivy primeneniia v meditsine.  
AU Kulikov V I; Muzia G I  
SO Vestnik Akademii meditsinskikh nauk SSSR, (1991) No. 10, pp. 13-7. Ref: 37  
Journal code: 7506153. ISSN: 0002-3027.  
CY USSR  
DT (ENGLISH ABSTRACT)  
(IN VITRO)  
Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
LA Russian  
FS Priority Journals  
EM 199204  
ED Entered STN: 9 May 1992  
Last Updated on STN: 9 May 1992  
Entered Medline: 21 Apr 1992  
AB Experimental data on the biological activity of phospholipid platelet-activation factor (PAF), its structural analogs and antagonists are discussed. The prospects of the use of PAF and PAF antagonists in medicine are under consideration. The conclusion is drawn that PAF antagonists may serve the basis for the development of highly potent drugs of new generation.  
CT Azepines: DU, diagnostic use  
Azepines: PD, pharmacology  
\*Azepines: TU, therapeutic use  
\*Diterpenes  
Fibrinolytic Agents: PD, pharmacology  
\*Fibrinolytic Agents: TU, therapeutic use  
Ginkgolides  
Humans  
Lactones: DU, diagnostic use  
Lactones: PD, pharmacology  
\*Lactones: TU, therapeutic use  
\*Lysophosphatidylcholines: PD, pharmacology  
\*Platelet Activating Factor: AA, analogs & derivatives  
Platelet Activating Factor: AI, antagonists & inhibitors  
\*Platelet Activating Factor: PH, physiology  
Platelet Activation: DE, drug effects  
\*Platelet Activation: PH, physiology  
Platelet Aggregation: DE, drug effects  
\*Platelet Aggregation: PH, physiology  
Platelet Function Tests  
Thrombosis: BL, blood  
Thrombosis: DT, drug therapy  
\*Thrombosis: ET, etiology  
Triazoles: DU, diagnostic use  
Triazoles: PD, pharmacology  
\*Triazoles: TU, therapeutic use  
RN 105219-56-5 (WEB 2086); 99796-69-7 (ginkgolide B)  
CN 0 (1-acylglycerylphosphorylcholine); 0 (1-alkyl-2-acyl-sn-glycero-3-phosphocholine); 0 (Azepines); 0 (Diterpenes); 0 (Fibrinolytic Agents); 0 (Ginkgolides); 0 (Lactones); 0 (Lysophosphatidylcholines\*\*  
\* ); 0 (Platelet Activating Factor); 0 (Triazoles)

=>

ANSWER 2 OF 22 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1990:514666 BIOSIS

DN PREV199090131942; BA90:131942

TI HYDROLYSIS OF 2 ACYL-SN-GLYCERO-3-PHOSPHOCHOLINES IN GUINEA-PIG HEART MITOCHONDRIA.

AU BADIANI K [Reprint author]; PAGE L; ARTHUR G

CS DEP BIOCHEM MOL BIOL, FAC MED, UNIV MANITOBA, 770 BANNATYNE AVE, MANIT, CANADA R3E 0W3

SO Biochemistry and Cell Biology, (1990) Vol. 68, No. 9, pp. 1090-1095.

CODEN: BCBIEQ. ISSN: 0829-8211.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 19 Nov 1990

Last Updated on STN: 19 Nov 1990

AB Although both 2-acyl-sn-glycero-3-phosphocholine and 1-acyl-sn-glycero-3-phosphocholine may be produced from phosphatidylcholine hydrolysis, studies on the former have lagged behind that of the latter. In this study a lysophospholipase A2 that hydrolyses 2-acyl-sn-glycero-3-phosphocholine has been characterized in guinea pig heart mitochondria. The lysophospholipase A2 activity was not dependent on Ca<sup>2+</sup> and was inhibited differentially by saturated and unsaturated fatty acids. This lysophospholipase A2 activity was able to discriminate among different molecular species of 2-acyl-sn-glycero-3-phosphocholines when they were presented individually or in pairs. The order of decreasing rates of hydrolysis of different molecular species of 2-lysophosphatidylcholines, when the substrates were presented singly, was 18:2 > 20:4 > 18:1 > 16:0. A differential inhibition of the rate of hydrolysis of the individual substrates was observed when the substrates were presented in pairs. The degree of inhibition was dependent on the molar ratio of the mixed substrates. The characteristics of the enzyme suggest that involvement in the selective release of fatty acids from mitochondrial phosphatidylcholine would depend on a high selectivity of phospholipase A1 for different molecular species of phosphatidylcholine. A lysophospholipase A1 activity was also characterized in the mitochondria with a distinct acyl specificity from the lysophospholipase A2. Other characteristics of the two lysophospholipases suggest that the two reactions are not catalyzed by the same enzyme.

CC Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Lipids 10066

Enzymes - Physiological studies 10808

Anatomy and Histology - Microscopic and ultramicroscopic anatomy 11108

Metabolism - Lipids 13006

Cardiovascular system - Physiology and biochemistry 14504

IT Major Concepts

Cardiovascular System (Transport and Circulation); Enzymology (Biochemistry and Molecular Biophysics); Metabolism; Morphology

IT Miscellaneous Descriptors

FATTY ACID RELEASE

ORGN Classifier

Caviidae 86300

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

ANSWER 2 OF 22 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1990:514666 BIOSIS

DN PREV199090131942; BA90:131942

TI HYDROLYSIS OF 2 ACYL-SN-GLYCERO-3-PHOSPHOCHOLINES IN GUINEA-PIG  
HEART MITOCHONDRIA.

AU BADIANI K [Reprint author]; PAGE L; ARTHUR G

CS DEP BIOCHEM MOL BIOL, FAC MED, UNIV MANITOBA, 770 BANNATYNE AVE, MANIT,  
CANADA R3E 0W3

SO Biochemistry and Cell Biology, (1990) Vol. 68, No. 9, pp.  
1090-1095.

CODEN: BCBIEQ. ISSN: 0829-8211.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 19 Nov 1990

Last Updated on STN: 19 Nov 1990

AB Although both 2-acyl-sn-glycero-3-phosphocholine and 1-acyl-sn-glycero-3-phosphocholine may be produced from phosphatidylcholine hydrolysis, studies on the former have lagged behind that of the latter. In this study a lysophospholipase A2 that hydrolyses 2-acyl-sn-glycero-3-phosphocholine has been characterized in guinea pig heart mitochondria. The lysophospholipase A2 activity was not dependent on Ca<sup>2+</sup> and was inhibited differentially by saturated and unsaturated fatty acids. This lysophospholipase A2 activity was able to discriminate among different molecular species of 2-acyl-sn-glycero-3-phosphocholines when they were presented individually or in pairs. The order of decreasing rates of hydrolysis of different molecular species of 2-lysophosphatidylcholines, when the substrates were presented singly, was 18:2 > 20:4 > 18:1 > 16:0. A differential inhibition of the rate of hydrolysis of the individual substrates was observed when the substrates were presented in pairs. The degree of inhibition was dependent on the molar ratio of the mixed substrates. The characteristics of the enzyme suggest that involvement in the selective release of fatty acids from mitochondrial phosphatidylcholine would depend on a high selectivity of phospholipase A1 for different molecular species of phosphatidylcholine. A lysophospholipase A1 activity was also characterized in the mitochondria with a distinct acyl specificity from the lysophospholipase A2. Other characteristics of the two lysophospholipases suggest that the two reactions are not catalyzed by the same enzyme.

CC Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Lipids 10066

Enzymes - Physiological studies 10808

Anatomy and Histology - Microscopic and ultramicroscopic anatomy 11108

Metabolism - Lipids 13006

Cardiovascular system - Physiology and biochemistry 14504

IT Major Concepts

Cardiovascular System (Transport and Circulation); Enzymology  
(Biochemistry and Molecular Biophysics); Metabolism; Morphology

IT Miscellaneous Descriptors

FATTY ACID RELEASE

ORGN Classifier

Caviidae 86300

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,  
Rodents, Vertebrates


[Search](#)
[Main Search](#) | [Advanced Keyword Search](#) | [Search History](#)
**Search:**  


[Refine Search](#)

&gt; You're searching: Scientific and Technical Information Center

**Item Information**

- ▶ [Subscriptions](#)
- [Holdings](#)

**Browse Catalog**

- by title:
- [Biochemistry and cel...](#)

**MARC Display**
**Biochemistry and cell biology Biochimie et biologie cellulaire.**

- Alt. Title: Biochemistry & cell biology  
 Biochimie et biologie cellulaire  
 Canadian journal of biochemistry and cell biology = Revue canadienne de biochimie et biologie cellulaire  
 Revue canadienne de biochimie et biologie cellulaire  
 Cover title: Canadian journal of biochemistry and cell biology =
- Author: Canadian Biochemical Society.  
 National Research Council Canada.  
 Canadian Society for Cell Biology.
- Imprint: Ottawa : National Research Council of Canada = Conseil national des recherches du Canada, 1986-
- URL: <http://search.epnet.com/direct.asp?jid=35G&db=aph> Click here for Online version via Academic Search Premier (ASP). Feb 2001-  
<http://proquest.umi.com/pqdweb?RQT=318&VName=PQD&clientid=19649&pmid=36120> Click here for Online version via Proquest. Jan 1, 1998-Present.
- Notes: Available on ADONIS, v. 73, no. 1-2 (1995) - v. 80, no. 4 (2002)  
 Includes bibliographies.  
 Articles in English; summaries in English and French.  
 Official journal of the Canadian Biochemical Society and the Canadian Society for Cell Biology.
- ISSN: 0829-8211
- Subjects: Biological chemistry -- Periodicals.  
 Cytology -- Periodicals.
- Description: v. : ill. ; 26 cm.
- Continues: Canadian journal of biochemistry and cell biology

**Subscription Summary**
**US Patent & Trademark Office**
**Location:** US Patent & Trademark Office

**Collection:** Biotechnology and Chemical Library Microfilm

Call No.: QP501 .C22 Microfilm

Copy No.: 1

Status: Not Currently Received

Media: film

Type:

Microfilm: v. 64 (1986) - v. 77 (1999)

Show all  
items

Email: [pamela.hoefl@uspto.gov](mailto:pamela.hoefl@uspto.gov) to ask questions or make suggestions.

Horizon Information Portal 3.05

Brought to you by *Scientific and Technical Information Center*